

5040 #7



PCT10

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/030,231

DATE: 02/08/2002

TIME: 10:40:54

Input Set : A:\CA5052US.txt

Output Set: N:\CRF3\02082002\J030231.raw

ENTERED

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3 <110> APPLICANT: ROCH, Philippe
4      MITTA, Guillaume
5      HUBERT, Florence
6      NOEL, Thierry
7      CNRS
8      IFREMER
10 <120> TITLE OF INVENTION: ANTIMICROBIAL PEPTIDES DERIVED FROM MOLLUSKS
12 <130> FILE REFERENCE: 045636-5052-US
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/030,231
C--> 15 <141> CURRENT FILING DATE: 2002-01-08
17 <150> PRIOR APPLICATION NUMBER: FR 9908858
18 <151> PRIOR FILING DATE: 1999-07-08
20 <150> PRIOR APPLICATION NUMBER: PCT/FR00/01975
21 <151> PRIOR FILING DATE: 2000-07-07
23 <160> NUMBER OF SEQ ID NOS: 7
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 663
27 <212> TYPE: DNA
28 <213> ORGANISM: Mytilus galloprovincialis
30 <220> FEATURE:
31 <221> NAME/KEY: CDS
32 <222> LOCATION: (43)..(330)
34 <220> FEATURE:
35 <221> NAME/KEY: mat_peptide
36 <222> LOCATION: (103)..(222)
38 <220> FEATURE:
39 <221> NAME/KEY: sig_peptide
40 <222> LOCATION: (43)..(102)
42 <400> SEQUENCE: 1
43 aaggataata ttttgattta actgcaaaact caaacgtaca at atg aag gca aca      54
44                                     Met Lys Ala Thr
45                                     -20
47 atc ttg tta gca gtt cta gtg gca gtc ttt gtc gca ggt acg gaa gct      102
48 Ile Leu Leu Ala Val Leu Val Ala Val Phe Val Ala Gly Thr Glu Ala
49 -15 -10 -5 -1
51 cat tcg cac gct tgt aca tca tac tgg tgt ggt aag ttt tgt gga act      150
52 His Ser His Ala Cys Thr Ser Tyr Trp Cys Gly Lys Phe Cys Gly Thr
53 1 5 10 15
55 gct agt tgc aca cat tat cta tgc aga gta ctc cat ccc ggt aaa atg      198
56 Ala Ser Cys Thr His Tyr Leu Cys Arg Val Leu His Pro Gly Lys Met
57 20 25 30
59 tgc gca tgt gtt cat tgc agc agg gtg aac aat cct ttc aga gtt aat      246
60 Cys Ala Cys Val His Cys Ser Arg Val Asn Asn Pro Phe Arg Val Asn

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100302

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61          35          40          45
63 caa gtt gct aaa agt att aac gat ttg gat tac act cca ata atg aag 294
64 Gln Val Ala Lys Ser Ile Asn Asp Leu Asp Tyr Thr Pro Ile Met Lys
65          50          55          60
67 tcg atg gaa aac ttg gac aat gga atg gat atg tta taagcaaaca 340
68 Ser Met Glu Asn Leu Asp Asn Gly Met Asp Met Leu
69 65          70          75
71 acttatgcaa tgcagatcac aactgtgaat ctttgcctatc attctcactg cttttcacct 400
73 ttcaacaaac gaaaaattat cagcaacttg aaaaataaca aacttgagtc atgtctgttc 460
75 agtttccagt ctaatatatta tatcattata tgaaagggtat aacaaaatta gtaccattgt 520
77 gttctaataag aaacaattta taaacaagaa acattacact ttaagtataa attaacagga 580
79 ttttgtcctg cagctgtttt atctttcttt tctcagctat agtctttctga ttgtaataaaa 640
81 atagcttgaa aaaaaaaaaa aaa 663
84 <210> SEQ ID NO: 2
85 <211> LENGTH: 96
86 <212> TYPE: PRT
87 <213> ORGANISM: Mytilus galloprovincialis
89 <400> SEQUENCE: 2
90 Met Lys Ala Thr Ile Leu Leu Ala Val Leu Val Ala Val Phe Val Ala
91 1          5          10          15
93 Gly Thr Glu Ala His Ser His Ala Cys Thr Ser Tyr Trp Cys Gly Lys
94          20          25          30
96 Phe Cys Gly Thr Ala Ser Cys Thr His Tyr Leu Cys Arg Val Leu His
97          35          40          45
99 Pro Gly Lys Met Cys Ala Cys Val His Cys Ser Arg Val Asn Asn Pro
100          50          55          60
102 Phe Arg Val Asn Gln Val Ala Lys Ser Ile Asn Asp Leu Asp Tyr Thr
103 65          70          75          80
105 Pro Ile Met Lys Ser Met Glu Asn Leu Asp Asn Gly Met Asp Met Leu
106          85          90          95
109 <210> SEQ ID NO: 3
110 <211> LENGTH: 681
111 <212> TYPE: DNA
112 <213> ORGANISM: Mytilus galloprovincialis
114 <220> FEATURE:
115 <221> NAME/KEY: CDS
116 <222> LOCATION: (13)..(300)
118 <220> FEATURE:
119 <221> NAME/KEY: mat_peptide
120 <222> LOCATION: (73)..(192)
122 <220> FEATURE:
123 <221> NAME/KEY: sig_peptide
124 <222> LOCATION: (13)..(72)
126 <400> SEQUENCE: 3
127 caaacgtaca ac atg aag gca aca atg ttg tta gca gtt gta gtg gct gtc 51
128          Met Lys Ala Thr Met Leu Leu Ala Val Val Val Ala Val
129          -20          -15          -10
131 ttt gtc gca ggt aca gaa gct cat ccg cat gtt tgc aca tcg tac tac 99
132 Phe Val Ala Gly Thr Glu Ala His Pro His Val Cys Thr Ser Tyr Tyr

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133          -5          -1  1          5
135 tgt agc aag ttt tgt ggg act gct ggt tgc aca cgt tat gga tgc cga 147
136 Cys Ser Lys Phe Cys Gly Thr Ala Gly Cys Thr Arg Tyr Gly Cys Arg
137 10          15          20          25
139 aat ctc cat cgc ggg aag ctt tgc ttc tgt ctt cat tgc agc agg gtg 195
140 Asn Leu His Arg Gly Lys Leu Cys Phe Cys Leu His Cys Ser Arg Val
141          30          35          40
143 aag ttc ccg ttt gga gca act caa gat gct aaa agt atg aac gaa ctg 243
144 Lys Phe Pro Phe Gly Ala Thr Gln Asp Ala Lys Ser Met Asn Glu Leu
145          45          50          55
147 gaa tac act cca ata atg aag tgc atg gaa aat ttg gac aac gga atg 291
148 Glu Tyr Thr Pro Ile Met Lys Ser Met Glu Asn Leu Asp Asn Gly Met
149          60          65          70
151 gat atg tta taagcaaact tatgacatga agatcacaaac tgtataacttt 340
152 Asp Met Leu
153 75
155 tgctattcct gtatccgctt tactcctttc ttcacacttt gtacggaatc cgtcaacaga 400
157 aaattcatca tcaacttgaa aactaaca aa agatgtgtcg cacacgttac actcaccagt 460
159 ccataagtta tatcattaaa aaaagatgaa tcaagttacc gttaacgtgt gttcagatat 520
161 atctctgaca gaagaagtaa ctgttaacaa gaaatactgt tttccctcaa gttattaaaa 580
163 attagaagtc tccctgcaac tgttttatct ttccttactc agttcttttt tcatgttcta 640
165 ataaaacagt ttgaaatgaa caaaaaaaaaa aaaaaaaaaa a 681
168 <210> SEQ ID NO: 4
169 <211> LENGTH: 96
170 <212> TYPE: PRT
171 <213> ORGANISM: Mytilus galloprovincialis
173 <400> SEQUENCE: 4
174 Met Lys Ala Thr Met Leu Leu Ala Val Val Val Ala Val Phe Val Ala
175 1          5          10          15
177 Gly Thr Glu Ala His Pro His Val Cys Thr Ser Tyr Tyr Cys Ser Lys
178          20          25          30
180 Phe Cys Gly Thr Ala Gly Cys Thr Arg Tyr Gly Cys Arg Asn Leu His
181          35          40          45
184 Arg Gly Lys Leu Cys Phe Cys Leu His Cys Ser Arg Val Lys Phe Pro
185          50          55          60
187 Phe Gly Ala Thr Gln Asp Ala Lys Ser Met Asn Glu Leu Glu Tyr Thr
188 65          70          75          80
190 Pro Ile Met Lys Ser Met Glu Asn Leu Asp Asn Gly Met Asp Met Leu
191          85          90          95
194 <210> SEQ ID NO: 5
195 <211> LENGTH: 40
196 <212> TYPE: PRT
197 <213> ORGANISM: Mytilus galloprovincialis
199 <220> FEATURE:
200 <221> NAME/KEY: misc_feature
201 <222> LOCATION: (2)..(2) /
202 <223> OTHER INFORMATION: Xaa can be Pro or Ser
204 <220> FEATURE:
205 <221> NAME/KEY: misc_feature

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206 <222> LOCATION: (4)..(4)
 207 <223> OTHER INFORMATION: Xaa can be Val or Ala
 209 <220> FEATURE:
 210 <221> NAME/KEY: misc_feature
 211 <222> LOCATION: (9)..(9)
 212 <223> OTHER INFORMATION: Xaa can be Tyr or Trp
 214 <220> FEATURE:
 215 <221> NAME/KEY: misc_feature
 216 <222> LOCATION: (11)..(18)
 217 <223> OTHER INFORMATION: Xaa can be Ser or Gly
 219 <220> FEATURE:
 220 <221> NAME/KEY: misc_feature
 221 <222> LOCATION: (21)..(21)
 222 <223> OTHER INFORMATION: Xaa can be Arg or His
 224 <220> FEATURE:
 225 <221> NAME/KEY: misc_feature
 226 <222> LOCATION: (23)..(23)
 227 <223> OTHER INFORMATION: Xaa can be Gly or Leu
 229 <220> FEATURE:
 230 <221> NAME/KEY: misc_feature
 231 <222> LOCATION: (26)..(26)
 232 <223> OTHER INFORMATION: Xaa can be Asn or Val
 234 <220> FEATURE:
 235 <221> NAME/KEY: misc_feature
 236 <222> LOCATION: (29)..(29)
 237 <223> OTHER INFORMATION: Xaa can be Arg or Pro
 239 <220> FEATURE:
 240 <221> NAME/KEY: misc_feature
 241 <222> LOCATION: (32)..(32)
 242 <223> OTHER INFORMATION: Xaa can be Leu or Met
 244 <220> FEATURE:
 245 <221> NAME/KEY: misc_feature
 246 <222> LOCATION: (34)..(34)
 247 <223> OTHER INFORMATION: Xaa can be Phe or Ala
 249 <220> FEATURE:
 250 <221> NAME/KEY: misc_feature
 251 <222> LOCATION: (36)..(36)
 252 <223> OTHER INFORMATION: Xaa can be Leu or Val
 254 <400> SEQUENCE: 5

W--> 255 His Xaa His Xaa Cys Thr Ser Tyr Xaa Cys Xaa Lys Phe Cys Gly Thr
 256 1 5 10 15
 W--> 258 Ala Xaa Cys Thr Xaa Tyr Xaa Cys Arg Xaa Leu His Xaa Gly Lys Xaa
 259 20 25 30
 W--> 261 Cys Xaa Cys Xaa His Cys Ser Arg
 262 35 40
 265 <210> SEQ ID NO: 6
 266 <211> LENGTH: 40
 267 <212> TYPE: PRT
 268 <213> ORGANISM: Mytilus galloprovincialis

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Input Set : A:\CA5052US.txt

Output Set: N:\CRF3\02082002\J030231.raw

270 <400> SEQUENCE: 6

271 His Ser His Ala Cys Thr Ser Tyr Trp Cys Gly Lys Phe Cys Gly Thr

272 1 5 10 15

274 Ala Ser Cys Thr His Tyr Leu Cys Arg Val Leu His Pro Gly Lys Met

275 20 25 30

277 Cys Ala Cys Val His Cys Ser Arg

278 35 40

281 <210> SEQ ID NO: 7

282 <211> LENGTH: 40

283 <212> TYPE: PRT

284 <213> ORGANISM: Mytilus galloprovincialis

286 <400> SEQUENCE: 7

287 His Pro His Val Cys Thr Ser Tyr Tyr Cys Ser Lys Phe Cys Gly Thr

288 1 5 10 15

290 Ala Gly Cys Thr Arg Tyr Gly Cys Arg Asn Leu His Arg Gly Lys Leu

291 20 25 30

293 Cys Phe Cys Leu His Cys Ser Arg

294 35 40

VERIFICATION SUMMARY

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Input Set : A:\CA5052US.txt

Output Set: N:\CRF3\02082002\J030231.raw

L:14 M:270 C: Current Application Number differs, Replaced Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5

L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5

L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5